

WHAT IS CLAIMED IS:

1. A 3D video camera system comprising:
 - a first camera providing an RGB output representing a left eye presentation in a 3D or stereoscopic scene;
 - a second camera providing an RGB output representing a right eye presentation in a 3D or stereoscopic scene;
 - a clock generator generating a clock pulse at a frequency up to four times a color system subcarrier frequency said clock pulse being coupled to a clock input of each camera;
 - a frame reset pulse coupled to a field rate pulse input of said camera(s), wherein said frame reset pulses synchronizes frame start points of said cameras;
 - an RGB output of each camera and a field ID pulse are coupled to a multiplexer;
 - said multiplexer switches said RGB output of said camera representing said left eye representation during a first field of a frame to an RGB output;
 - said multiplexer switches said RGB output of said camera representing said right eye representation during a second field of a frame to said RGB output.
2. The 3D camera system of claim 1 wherein said first and second cameras are solid-state cameras.
3. The 3D video camera system of claim 1 further comprising:
 - an RGB encoder with RGB input signals coupled from an RGB output of said multiplexer;

a composite sync signal coupled from a composite sync output of either solid state camera; and

5

10

5.

15

7.

8.

20

1

25

providing a multiplexer with a field identification pulse input, a first and second set of RGB inputs and a set of multiplexed RGB outputs; providing a clock pulse into said first camera and said second camera;

5 coupling a frame reset pulse from either camera or to the other camera, wherein said clock pulse and said frame reset pulse provides a synchronization of the RGB outputs of said first camera and said second cameras;

10 coupling a field identification pulse from either camera to said field identification input of said multiplexer; and providing multiplexed RGB outputs of said first camera and said second camera wherein said RGB outputs of said first camera appear during one field of said multiplexed signal and said RGB outputs of said second camera appear during the other field of the multiplexed.

11. The method claim 10 wherein said plurality of cameras is two cameras used in a 3D camera system.

12. A method of synchronizing video cameras comprising:
15 providing a plurality of video cameras, each camera having a clock pulse input, a frame reset pulse output, a frame-reset pulse input, a field identification pulse output and a set of RGB video output signals;

providing a clock pulse into said first camera and said second camera;

20 coupling a frame reset pulse from one of said cameras to a frame reset pulse input to remaining said cameras, wherein said clock pulse and said frame reset pulse provides a synchronization of the RGB outputs of said plurality of cameras.

13. A method of mechanically adjusting the aiming of 3D
25 lens/cameras within a 3D or stereoscopic camera system, comprising:

simultaneously rotating about their horizontal axes both said 3D lens/ cameras with one adjustment; and

5

10

15

20

25